

WHAT IS CLAIMED IS:

1. A substrate comprising:

fine line obtained according to a fine-line forming process including a process of projecting light from above said substrate onto predetermined region on a photosensitive material provided on said substrate and a developing process after the light projection process,

wherein a narrow-width portion is provided at an end portion of said fine line in a longitudinal direction of said fine line, and

wherein a width of the narrow-width portion is smaller than a width of a portion adjacent to the narrow-width portion.

2. A substrate according to Claim 1, wherein said fine line is obtained by being heated after the developing process.

3. A substrate according to Claim 2, wherein said fine line obtained by heating has a width smaller than a width of the photosensitive material after the developing process and before the heating.

4. A substrate according to Claim 2 or 3, wherein the fine line obtained by the heating has a thickness equal to or more than $5 \mu\text{m}$.

5. A substrate according to any one of Claims 1 – 4, wherein the photosensitive material immediately before projecting the light has a thickness equal to or more than $8 \mu\text{m}$.

6. A substrate according to any one of Claims 1 – 5, wherein the fine line is conductive.

7. A substrate according to Claim 6, wherein the fine line is wire.

8. A substrate according to any one of Claims 1 – 7, wherein the photosensitive material is a metal paste.

9. A substrate according to Claim 8, wherein the metal paste contains silver as a main component for providing a conductive property.

10. A substrate according to any one of Claims 1 – 9, wherein the end portion has a cut provided from a distal end of the end portion such that the end portion is divided into at least two portions.

11. A substrate according to any one of Claims 1 – 10, wherein the end portion is chamfered from a distal end of the end portion.

12. A substrate according to any one of Claims 1 – 11, wherein a length of the narrow-width portion in the longitudinal direction is at least half a width of a portion adjacent to the narrow-width portion.

13. A substrate according to any one of Claims 1 – 12, wherein the end portion includes a portion where the width gradually decreases toward a distal end of the end portion.

14. method for manufacturing a substrate having fine line, said method comprising:

a fine-line forming step of forming the fine line, wherein a narrow-width portion is provided at an end portion of the fine line in a longitudinal direction, and the fine line is formed so that a width of the narrow-width portion is smaller than a width of a portion adjacent to the narrow-width portion,

said fine-line forming step comprising:

a step of providing a photosensitive material onto the substrate;

a step of projecting light from above the substrate onto predetermined region on the photosensitive material; and

a developing step after said light projection step.

15. An electron-source substrate comprising:

a substrate according to any one of Claims 1 – 13; and

electron emitting device provided on said substrate,

wherein said fine line is wire for supplying said electron emitting device with a signal for driving said electron emitting device.

16. An electron-source substrate according to Claim 15, wherein a plurality of said electron emitting devices are provided, wherein said plurality of electron emitting devices are arranged in the shape of a matrix, and wherein a plurality of said wires perform matrix connection of said plurality of electron emitting devices arranged in the shape of the matrix.

17. An image display apparatus comprising:
an electron-source substrate according to Claim 15 or 16; and
phosphor for emitting light by electrons emitted from said electron
emitting device.
18. An image display apparatus comprising:
a substrate according to any one of Claims 1 – 13; and
image display devices,
wherein said fine lines are wires for supplying said image display
devices with a signal for driving said image display devices.